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ON TEACHING GRAMMAR.

This is a subject which has justly received considerable attention from the thinking men and women who are interested in the advancement of education in our country and in others; and I hold that, of all the branches taught in our common schools, there is no one better adapted to wake up the mind of a child, and put in action his intellectual machinery, no one in which he can be so enthusiastically interested, and led to meet the teacher with such eagerness; no one, indeed, which admits of so much exercise of real teaching skill. And yet it is the one of all others, on which the most time and patience have to be expended by the instructor, and over which most tears are shed and heart-aches endured by unfortunate little urchins, racking their brains to remember the long, dry definitions, devised by some learned, doubtless, but most injudicious grammarian. To most children at the age when grammar is usually commenced — at least, in the Public Schools of Boston — these definitions are only meaningless strings of words, conveying to the mind no more idea than so much Greek or Hebrew.

Nor is this necessarily the result of poor teaching. I have heard teachers of deservedly good repute say that they considered the time devoted to grammar in the third class of our Grammar Schools, where the average age of the children is about ten years,

as so much time wasted. And they are right. As they teach it, it *is* time wasted, and worse than wasted: for the child, whenever he is unfortunate enough to prepare the lesson assigned in such a manner as to make a creditable recitation, not only does not gain an intelligent idea of a single principle, but is forming a bad, a most pernicious habit of mind; a habit of taking on trust, of learning by rote, before grasping the ideas contained in the words he repeats.

As grammar lessons are generally, or, at least frequently, conducted, it seems to me, that the child who takes his seat in disgrace, with a reproof for idleness, carelessness, or whatever the teacher may consider the cause of his failure, is far better off than his neighbor, who has the whole lesson at his tongue's end, and can discharge his polysyllabic volleys without apparent effort. The former, in disgrace though he be, has lost nothing, even if he has gained nothing; but the latter has not only gained nothing, but has lost much: for the step which he has taken towards the formation of a bad habit of mind has retarded the free development of his mental powers more, much more, than any information he may have contrived to glean can atone for.

Better that a child should have a thorough understanding of some one thing, an understanding acquired by the exercise of his own reason, an understanding in which there is no weak joint, than that he should have a vague, general impression — it cannot be called an idea — of five hundred.

It is really surprising that, in the present advanced state of civilization, any children should be so imposed upon, as are our precious, much-talked-of Massachusetts children; more surprising still, that no teachers, or at least so few, have broken through the hedge of custom, and declared against this imposition upon the brain of childhood. All, or nearly all, content themselves with declaring against the introduction of the study into our public schools, — I speak more particularly of Boston public schools, — at the age at which it is now commenced. Look at one of the grammars whose use by children just entering on the new and untried fields of grammatical lore has been sanctioned by high authority: what is the first statement we find? "Language is the

medium by which we express our thoughts." The beauty of the adaptation of this information to the mind of a child will be at once perceived. Before the poor child has recovered from the effects of it, behold, another shock! "Language consists of a great variety of sounds which are used as the signs of our ideas, and are called words." After that, what child could have any difficulty in defining a word? Of course it is of immense importance that he should be able to do so, promptly and fluently. But now comes number three, capping the climax! "All these sounds may be reduced to a small number of simple sounds, which are made intelligible to the eye, as well as to the ear, by means of certain marks called letters!"

Now, how can a child ever feel any interest in, or attraction towards a study which is presented to him in this appalling, and awe-inspiring manner? What possible benefit can it be to him, to have these learned and incomprehensible definitions thus hurled at him, at the very outset of his long and toilsome journey? It may be said the teacher can make it intelligible; but I think not. If she puts the book into the child's hands, he will learn those definitions, without attaching the least idea to them, however much they may be explained. And yet each teacher in our city schools is required to carry her class to a certain limit in this book, and almost all teachers, understanding this regulation, literally do *carry* their classes to the required limit, at the same time feeling its uselessness, even if they do not feel its hurtfulness. All through the grammar from which I have already quoted, and the preface of which states that it is designed for beginners, the same glaring defects present themselves; for instance: "A vowel denotes pure sound only; a consonant, a contact of the organs of speech." Or again: "Case is the sense or form in which nouns and pronouns are construed with other words, to express thought." Or still again: "A participle is a form of the verb, that merely assumes the act, or state, and is construed like an adjective."

Perhaps it may be urged: "But the author of this book explains all these difficult terms in notes at the bottom of the page." Very true; — take for example his term "reflexive": "Reflexive,—turning back upon itself, that the act or relation reverts to the subject."

What child could possibly have a false idea of the term "reflexive" after that!

I was present at a recitation not long since, in a school that shall be nameless, when the following incident occurred. A child was asked to give the definition of a primitive, a derivative, and a compound word. Without a moment's hesitation, he rattled it glibly off. "Very well," said the teacher with an approving smile, "now, will you give an example of a compound word?" That was something of a poser; he hesitated and began to look somewhat alarmed at the near prospect of a lost credit, when all at once his face brightened, — he had it! "Well," said the teacher, encouragingly; "Breeze-build!" exclaimed the boy in a triumphant tone. Recovering from my first amused surprise, I glanced down the page to see if I could discover any clew to the idea in his mind, which might have led to such an absurd reply, and discovered that the examples of primitive, derivative, and compound words were contained in the same paragraph, and the poor child, probably thinking that any two words coming together, constituted a compound word, had given the two examples of a primitive word.

But I suppose readers will say by this time: "We know all this. If you have any suggestions to offer, as to how these difficulties may be obviated, let us have them." Here, then, are my suggestions. New ideas I will not call them, for I doubt not some dissatisfied and determined teacher may have devised something similar, before now. To go back, then, to my first statement, I hold that grammar, from being the special object of school-boy hatred, may be made his delight; that from being the drudgery of the teacher's life, it may be made a recreation. How? By taking a firm stand on these principles of Pestalozzi, the great educational law-giver: — 1. "Develop the idea, then give the term. 2. "Proceed from the known to the unknown; from the particular to the general; from the concrete to the abstract; from the simple to the more difficult." 3. "First synthesis, then analysis — not the order of the subject, but the order of nature."

The truth of these principles, I believe, will be admitted by every teacher; and no one can fail to see the glaring violations of them, furnished by all the examples I have quoted. But how, in

a first lesson, can these principles be carried out? I will try to exemplify.

Here are two teachers, we will suppose, one of the old school, and the other of the new. The first, standing before her class, book in hand, makes the following announcement — with an inward groan at the drudgery in prospect: "The class may take the first four remarks," or, as it is probably stated, "the coarse print on such a page." These remarks we will assume, are the following: "A noun is a name. There are two kinds of nouns — proper and common. A proper noun is the name of a particular object, which distinguishes it from other objects of the same kind. A common noun is a name that can be applied to all objects of the same kind."

The teacher reads these remarks to the class; then, thinking some explanation necessary, continues, "Perhaps you may not understand the difference between a proper and a common noun. I will try to make it clear. Suppose I say: 'A boy in this room is out of order; do you know whom I mean?' — 'No.' 'Why not?' — 'Because we are all boys.' — 'Or, in other words, the name 'boy' may be applied to each one of you. Now look at the definition, and see whether you would consider boy a proper or a common noun, if it can be applied to each of you.' A correct answer being soon obtained, the teacher continues, "Suppose I say, 'Smith is out of order,' do you know then whom I mean?" "Yes." — "Why?" — "Because there is only one Smith in the room." "Then we may say that his name 'Smith' distinguishes that particular boy, from all the other boys, may we not? What kind of a noun is 'Smith,' then?" After a few more illustrations of this sort, comes the inevitable finale: "Study the lesson, now; be able to recite each of these definitions, promptly." We will pass over the fact, that many and many a teacher, would content herself with the last remark, without any previous explanation.

It may be said that this is a good method of teaching the subject; that the distinction is made clear to the children and illustrated in such a manner, that the definitions are no longer meaningless to them. It may be so; these definitions are couched in more appropriate language than some that have been quoted. But

let us go back to our principle; "Develop the idea — then give the term." Is it obeyed in requiring a child to commit to memory the first remark, "A noun is a name?" Does not the term come first, and is the idea developed at all? The weakness of this method is obvious, if we take a firm stand on our great, underlying principles.

Let us now take a glance into the school-room of our second imaginary teacher. What do we see? She is standing before her class, — no book in her hand, — saying, in a cheery tone, totally free from that undertone of weariness so obvious to a quick perception in the voice of the first: "Tell me the names of some of the objects that you see in the room," — writing them on the board as they are given, — "the names of some of the objects you can see from the window; of some of those in your own homes." Continuing in this way till she has made out a list of some fifteen or twenty words, she asks, at length: "What are all these words that I have written?" — "Names of objects." Now, it will be observed, the children have a clear idea of a noun; ask them for the name of an object, and they cannot be mistaken. The first requirement, then, of our principle is acted upon; an idea is developed. What remains? Give the term. This is done in a minute, and the whole thing is finished. How simple this operation is! Yet the children are kept interested throughout the lesson; even the dullest are familiar with it, and the knowledge is gained without the exercise of severity on the part of the teacher, or of conscious effort on that of the pupils. In fifteen minutes the idea has become a part of themselves, and they would no more think of calling a noun a conjunction — as I have heard boys fourteen, fifteen, sixteen years of age do, repeatedly — than they would of calling white black. And this applies to the dullest children in the class as well as to the quickest.

At the end of the first lesson let us see how the two classes compare. Those of the first, who have worked hard, either from choice or under compulsion, have learned the words contained in the definitions of a noun, and the two great classes of nouns, with such idea as they may have been able to extract. Two-thirds

of the four-fifths of the class who learned the lesson attached no idea whatever to the words, and consequently in a year from the time, unless their memory is refreshed by constant reviews, will have forgotten the whole matter. Has there been any intellectual growth here?

In the second class, every child has added to himself a new idea, which he can clothe in words, because it is a part of himself. Every child, then, has taken one step farther towards that development of mind, which it is, or should be, the aim of all educators to promote. To be sure, they have learned only one thing; but has the other class really learned even that? Let us trace the progress of the two classes for the next six months: this is easily done in the first case, since the first lesson is a type of all the others; for at each, a page or two is assigned, explained, and committed to memory. At the end of the six months, they have, perhaps, gone over some forty or fifty pages. A very few, say one-fifth, and these the choice spirits of the class, have gained a few intelligible ideas; three-fifths have gained a collection of words alone, and one-fifth are quite innocent of either words or ideas.

The second teacher, bearing in mind the principle, "not the order of the subject, but the order of nature," gives her second lesson on the verb, calling on the children for the names of different actions, as "walk," "run," "ride," &c., writing them as they are dictated, and then proceeding in the same manner, as with the noun. At the conclusion of this lesson, the children have gained two distinct ideas, clothed in language which they themselves have applied, the ideas, namely, of a noun and a verb. Now combine them, and they have a third,—the idea of a sentence. By a few well-directed questions, the teacher here leads them to perceive and state that the verb tells something of the noun. Through all this, notice how faithfully the principle, "first synthesis, then analysis," has been carried out.

The readers will see at what the teacher is aiming. She is aiming to lead her children to an understanding of the relations of words to each other; to see at a glance the bearing and meaning of a sentence, and to feel the force of each word composing it. She is laying the foundation of a thorough

knowledge of the English language, and doing something to diminish the number of *mute* geniuses in the world.

Her third lesson is on the adjective. She develops this idea by letting the children describe one or more of the objects, the names of which are written on the board, writing the descriptive words as they are given, before the names of the objects described. Having thus developed the idea, the children will readily clothe it in words; the teacher gives the term, and another step towards the great end is accomplished. The subject of the adverb is next taken up; then the article; then the conjunction. Then come the personal pronoun, the preposition, the interjection. Now that the ground-work is laid, the children can assign to any word its place as a part of speech, and with as good an idea of what they are talking about, as the most learned of grammarians. As the several parts of speech have been taken up, the teacher has combined examples of them into sentences, the children pointing out the relation of each word to the others. When the whole nine have been considered, suppose such a sentence as this is given the class to parse: "The black horse runs swiftly to the stable." They proceed in their own childish way, having no knowledge of technical terms, as follows: "The is an article, telling that a particular black horse is meant; black is an adjective, and tells what kind of a horse it is; horse is a noun, and tells what is running; runs is a verb, and tells what the horse does; swiftly, is an adverb, telling how the horse runs; to, is a preposition joining runs and stable; the, is an article telling that a particular stable is meant; and stable is a noun, that tells to what the horse runs." So much work can be accomplished in five months. Next would come the technical terms for these childish expressions, "limits," "agrees with," "qualifies, &c." The subject of case would also be brought in here.

In a month more the children parse readily, accurately, and in good language, any simple sentence. This closes the six months' work. The children have used no books, — have committed to memory no definitions but such as they have themselves dictated. Yet which of the two classes has been the most truly educated?

Let a simple sentence be given to the first class, and it will be

found that they have no more idea of the relations and nice dependence of its words on one another, than if they had never looked inside of a grammar. They have filled their minds with rubbish, among which can be detected, only here and there, and that with much difficulty, the sparkle of a half smothered idea. These are the children who will cause their teachers such trials of patience and vexation of spirit, when they shall have attained an age, at which they might be reasonably expected to distinguish a noun from a conjunction, or a verb from an adjective. But in the minds of the second class, we find a well-defined, orderly, and methodical array of strong, bright ideas, with not a particle of rubbish to quench or weaken their lustre.

It may be asked "Would you never use a book"? Yes; after six months more, or so, on the different classes into which the parts of speech are divided, with the grammatical accidents, they will be ready for the book, and the thousand and one nice points and fine shades which our language furnishes.

I sincerely hope that a reformation of some sort may be effected in the teaching of this branch of knowledge, before long,—that grammar may be raised to its proper place in the list of school studies, and made as interesting to the child as is his history or geography. It can be done, if every teacher will take hold of the work with a right good will, keeping constantly in view the principles, upon which all our teaching should be grounded: "Develop the idea, before giving the term." "Synthesis, before analysis,—not the order of the subject, but the order of nature."

A BOSTON TEACHER.

PUBLIC SCHOOLS.

FROM THE DOCTORS' POINT OF VIEW.

[The following excellent article printed originally in the Middlesex (Woburn) Journal, has been also printed on a separate sheet for general distribution in that neighborhood. We commend the action of the Middlesex physicians as an example for imitation by their brethren in other parts of the country.]

At a regular meeting of the Middlesex East District Medical Society, in July, 1865, the subject of the influence of our Public Schools on the health of the children attending them being under discussion, a committee was appointed to report in full on the subject, which was done in September; and after much discussion the same committee was directed to prepare, in as concise form as possible, some practical advice for avoiding certain dangers now threatening the health of the children in our schools. This second report was submitted to the Society in November last, and discussed as before, when the same committee was directed to publish the suggestions with such additions in the way of explanation as might seem advisable. This they now do in the following maxims, which may be considered to embody the deliberate opinion of the members of the Society.

MAXIMS.

- 1st. *No child should be allowed to attend school before the beginning of its 6th year.*

Because the whole of the first five years of life are needed to give the physical nature a fair start, which would be prevented by the confinement and restraint of the school-room: — because up to that time every child has enough to do in learning to use its limbs and senses, to talk, to obey: — because extended experience has proved that children who have never been to school before they are five years old, make more rapid progress than those who begin their school life earlier.

- 2d. *The duration of daily attendance (INCLUDING time given to recess and physical exercise) should not exceed 4½ hours for the Primary Schools; 6 hours for the other Schools.*

Because the liability to injury of both mind and body from sedentary application is in proportion to the youth of the student, and because as much can be accomplished in this time as in a longer attendance, which is only a weariness to both flesh and spirit.

3d. *There should be NO study required out of school,—unless at High Schools; and this SHOULD NOT EXCEED ONE HOUR.*

Seven hours of study being as much as most adult scholars can bear, it is folly to suppose that immature minds in *growing* bodies can endure more.

4th. *Recess time should be devoted to play OUTSIDE THE SCHOOL-ROOM—unless during very stormy weather—and as this time rightly belongs to the pupils, they should not be deprived of it except for some serious offence; and those who are not deprived of it should not be ALLOWED to spend it in study; and no child should EVER be confined to the school-room during an entire session. The MINIMUM of recess-time should be 15 MINUTES IN EACH SESSION, and in Primary Schools there should be more than one recess in each session.*

Recess is a most important relief to the weariness of muscle and of mind, which every child (and most teachers) feel after being in school for 1 1-2 or 2 hours. Without it there comes on a mental listlessness and a physical restlessness, which defeat the very purposes of school. The need of such relief occurs at more frequent intervals in proportion to the youth of the child; consequently there should be more recesses in primary than in other schools.

5th. *Physical exercise should be used in school to prevent nervous and muscular fatigue and to relieve monotony, but NOT as MUSCULAR TRAINING. It should be practised by both teachers and children for at least five minutes in every hour not broken by recess, and should be "timed" by music. In Primary schools every half hour should be broken by exercise, recess, or singing.*

This maxim rests on the same general ground as No. 4. Such exercises are highly prized in all schools where they have been fairly tried, and they tend to produce a unity of action and feeling, a homogeneity in the school which is very valuable.

6th. *Ventilation should be amply provided for by OTHER MEANS THAN OPEN WINDOWS, though these should be used in addition to the special means during recess and exercise time.*

Because to open windows during cold weather is to admit streams of cold air upon children, when they are most liable to "catch cold," as physicians have frequent occasion to observe. When the body is aglow with exercise, it can endure and enjoy a temperature and even a current of air, which would chill it when at rest; therefore, fresh air may be introduced with safety through the windows during recess and exercise time, except in very severe weather.

Of all methods of heating, a close stove is the most objectionable, because it introduces *no fresh air*, and whenever one is used in a school-room, it should be wholly or partially walled in with metal screens, inside which a "cold air box" should open, as in all furnaces.

7th. Lessons should be scrupulously apportioned to the average capacity of the pupils; and in Primary schools the SLATE should be used MORE, and books less, and instruction should be given as much as possible on the principles of "Object Teaching."

If the first part of this maxim be not observed, the majority of the scholars (for whose benefit the school is sustained), will be overtasked.

The advantages of using the slate as advised, are very great; the hand and the eye are trained, writing is earlier and more pleasantly learned, little children are agreeably and profitably occupied, when they would otherwise be idle, unhappy and troublesome.

Of "Object Teaching" we have only space to say that the principle which underlies it is, that the teacher should avail himself of the natural preponderance of the powers of perception and observation in childhood, should go from the known to the unknown, from the concrete to the abstract, and should neglect no opportunity to illustrate each lesson from *familiar* sources.

(Signed)

F. WINSOR,

J. D. MANSFIELD,

Special Committee Middlesex East Dist. Med. Soc.

INTELLECTUAL GYMNASTICS.

The storm of opposition which attended the early introduction of Object Teaching, has nearly subsided. Leaders in the educational ranks have set their seal upon it, and the question among earnest teachers is not now, "Shall Object Lessons be given?" but "How shall we learn to give them?"

At this point, a few suggestions may be of value to those who are unable to avail themselves of the advantages now offered in so many of our Normal Schools.

As a first requisite, a teacher must know and feel the utility of such instruction, and that, too, for her own school.

Then hand in hand with this perception must go the power of best promoting this utility.

To make these suggestions practical, I will illustrate them by a lesson actually given to a class of children of about eight years of age, upon a piece of *Bread*.

The object of the lesson is twofold. The first or primary aim is *not* to give instruction *about bread*.

This instruction may be of importance, but it bears only that relation to the *real* aim, which any physical exercise does to the power acquired by it. The aim of the lesson-giver is to develop mind, as that of the gymnast is to develop muscle.

With this high purpose the teacher selects her subject,—something simple, familiar, useful,—and the question which first arises is, How may this lesson be made to strengthen the mental power of the class. The child must observe, recall, arrange and reason upon all that comes within the sphere of his knowledge of *Bread*.

1st. The Introduction. The design of which is to interest the children in the subject, and make them feel that learning all they can, from time to time, about these simple things will help them, by and by, when grown up, to grapple with those more difficult. This connecting the lessons as occasion may permit, with something future, will disabuse the children of any feeling they may have that these exercises are simply amusements.

2ND. — THE LESSON ITSELF. The simplest exercise is that of

perception. The teacher arranges in her own mind what may be learned by the senses. *It is white, soft, spongy, porous, pleasant to the taste.* Simple experiments show it to be *crumbling and absorbent*, and her previous knowledge enables her to add *a vegetable substance — manufactured, wholesome and nutritious.*

By the same three mental processes which guided the teacher, the children may, under her direction, acquire the same knowledge. The first "white, soft," etc., will be readily given by the children, and may be passed over rapidly, as previous and simpler lessons may have involved many of the same ideas.

2. The bread is then put into a saucer containing a little water, the children telling what is done, — after a moment the bread is taken up. "Where is the water?" "The bread has soaked it up." The teacher says, "Yes, *soaked up*; or, a better word is, *absorbed*, and because the bread will soak up or absorb the water, we will say *it is absorbent*." The children pronounce and spell the word, and mention other things, as sponge, cake, &c., which will soak up water, telling in each case what they say of them and why. Crumbs have by this time collected, and the attention of the children is directed to them, and the name given. A child is directed to make more with a fresh piece of bread, and is asked what he is doing? "*Crumbling* the bread." The sentence, "*the bread is crumbling*," is given, or, if the children be advanced, the word *friable* may be used. In reply to the question where we get the bread, the children say it is made by the baker or cook.

Speak of apples which grow ready for eating, — potatoes which must be cooked, — and candy which must be *made*. The children tell to which of these classes bread belongs. Refer to the process of making — the flour wet, mixed with yeast, kneaded and baked.

Give the term "manufactured" with the definition, "made by hand or machinery." The children speak of other things which are manufactured, to make the term familiar. For vegetable substance, refer children to wheat and where we get it; and the children distinguish between a vegetable and something made from it. The sentence embracing these qualities is then formed by the children. *The bread is a vegetable substance, crumbling, absorbent and manufactured.*"

3. "Wholesome and nutritious" remain, and if the children have not been ready with the other terms, may be left for another day.

"Wholesome" may be easily developed by reference to some hurtful substance. The children are led to see that of rich cake and pastry they can eat but little, but of bread, they can eat as much as they like and as often as they like. Several articles are mentioned, the children telling which are, and which are not wholesome. The conversation upon the term "wholesome," has prepared the children for the question as to the use of food; various answers will be obtained, such as "To make us grow," "To keep us strong," etc., and from these the teacher gets a definition of nutritious and gives the term. For review of the two last, the children give examples of things wholesome and nutritious,—things wholesome and not nutritious, and those nutritious only.

The *summary* or review of the whole lesson may be put on the board, by the teacher as dictated by the children, thus: Bread is white, soft, spongy, porous. It is a vegetable substance, crumbling, absorbent, wholesome and nutritious.

J. H. S.

HOW THE NEIGHBORS CAN HELP THE SCHOOL-MISTRESS.

We suppose all our readers have read the famous story entitled "Eyes and no Eyes." Did it ever occur to them to ask, which of the two youths therein described the majority of children at our common schools, if examined in the same way, would most resemble — so far we mean, as the influences of their school education extend? Children are observers by nature, and many a child gives himself an education in the woods and fields, and shops and streets, which goes far to make up for the shortcomings of school in cultivating the observing faculties. But how far, does it ever occur to any one to ask, is this natural self-education helped and guided, as it might be and ought to be, by school teaching? We fear, not very much. We suppose it will not be denied that our present methods of school teaching are defective in this important depart-

ment, the cultivation and development of the observing faculties. We do not wish in this article to dwell on the deficiency, after so much has been said on the subject, but to suggest some practical, and easily adopted methods for its remedy. Most of our primary teachers shrink from the thought of attempting to teach science or natural history. They have never been instructed themselves, and know nothing about it; and if it were really a question of teaching science as such, there would be nothing more to be said. But in our view there is a great deal to be done to *prepare* children for scientific teaching, which is quite within the reach of any teacher who knows how to read, and cares to take a little trouble for the good of her pupils.

The best preparation for a systematic study of science, in after life, is an early cultivation of the observing faculties, and that can be begun with children without any science at all. Teach children to *see*; they do not really see unless they are taught. Show two children the same object on the same picture, and ask them to describe it, and observe how much more one sees than the other. Bring a bunch of fresh leaves into the school-room, and call the attention of the children to the variety in their forms, or a nosegay of flowers and give them a lesson in color; you may know nothing of botany, and yet do this. "Not long ago," says a sensible Englishman, "I went into a girls' school, and observed that the mistress entered with a basket in her hand, out of which she took several things which perhaps you would not expect in a school. There was an orange, and a lemon, and some bits of green wood with the bark stripped up; also a lump of sugar and a phial, and a few other things. A friend of mine who was with me, and who was quite one of the uninitiated—quite in the dark about education—when he saw the lemon and the sugar, and a bottle containing some mysterious liquid, said "What, is she going to make the girls some punch?" But it was not so. She cut the lemon first, and peeled it, and shewed where the fine aromatic bitter resides which is so valuable for flavoring in cookery, and for invalids; she explained that the pulp is unwholesome and indigestible. She then described the islands and countries from whence these fruits are brought. Moreover she had a microscope by which the girls were allowed

to examine the crystals of the sugar, and the animalcula in a drop of water, the fibres of the wood, and the circulation of the sap. These things interest children very much, "and set them a' thinking." *

"Sets them a' thinking," — Yes; and what is school good for unless it sets them a' thinking? Now we have a little practical scheme to propose, to further this kind of teaching. Let us imagine a district school in a country village. How easy it would be to provide at a small expense a case of drawers — we have one in our eye, made by a handy carpenter — the upper ones shallow, and the others gradually increasing in depth — to be used as a school museum, open to the contributions of scholars, teachers and neighbors. We do not mean a museum of gimcracks and curiosities — a reel in a bottle, or a piece of the frigate Constitution — but of objects worthy of study and illustrative of school lessons, and such as it will be profitable and practically useful for children to know about. We will try to show how such a little museum could very easily be furnished.

A series might be made of various articles used as food — the cereal grains, wheat, barley, oats, rye, &c.; and other seeds such as beans, peas, lentils, rice; and a very little knowledge of botany and chemistry would go a great way in helping to classify them and explain their constituent elements. An interesting series of edible nuts could be made, both of home and foreign growth and of specimens of the wood of many of the trees which produced them; — not only walnuts, chestnuts, &c., but almonds, English walnuts, so-called, ground nuts, pecan nuts, &c. Spices and condiments would furnish a very interesting series; and here we propose to call in the help of a neighbor. We are safe in supposing that the teacher's salary is too small to allow of her spending any money on the little enterprise, and there is no appropriation, we will suppose, of town money to cover such an extraordinary expense: but we are sure there are many towns where a carpenter could be found to build the case of drawers for love of the cause of education, and where the grocer would

* From *What to Learn and What to Unlearn*, p. 18, by Rev. H. Fearon.

interest himself with all his heart in gathering together a series of specimens of objects that he sells, which would be suitable for such a purpose. Suppose then, that he got together a few peppercorns, some cloves, a nutmeg, a few bits of ginger, allspice, &c., and also a little rice, a little sago, some cacao beans (though whole beans perhaps would have to be procured from a chocolate factory), specimens of sugar in all its different forms (though these we fear would have to be kept under lock and key for fear of *practical* experiments upon them), black and green tea, a few coffee beans, and many other articles. The quantity of each sufficient for a specimen, would be so exceedingly small, that no one would grudge the trifling expense.

Suppose now another neighbor, in the shape of the village apothecary, should step in, and furnish such specimens of drugs and medicines in their crude shape, as would not be dangerous from their poisonous character, or as would illustrate the botany of foreign lands — it can easily be seen how from home supplies alone, a long list of objects could be obtained, which would give inexhaustible material for interesting study, and illustrations for school lessons. Many teachers could go further, and draw supplies from remoter sources. We once undertook such a museum, though more pressing duties prevented us from carrying out our plan thoroughly, and a kind friend in the city, a large wholesale dealer, in drugs and dye-stuffs, exerted himself to furnish us with a series of specimens which would have been a valuable addition to a museum of much greater pretensions. We will mention the names of some of them: we doubt whether our readers will know the uses of them all: — vegetable ivory, divi-divi, valonia, turmeric, indigo, gum dammar, gum senegal, gum benzoin, gum arabic, gum tragacanth, gum gamboge, gum guaiacum, cudbear, orchilla, scammony, gutta percha.

In the department of natural history the children themselves should be set to work as collectors. Let them be encouraged to capture insects, to collect chrysalids, minerals, &c., and to dry plants for an herbarium. We have seen a beautiful collection of different kinds of wood, both in longitudinal and transverse sections, with their bark, in such a museum.

No matter, we say, if neither teacher nor pupil at the outset have much scientific knowledge. Let them gain knowledge as the first student did, from the objects themselves. But the teacher, in almost all instances, can have a few cheap sources of knowledge accessible to her. We hope the time will come when no school-room will be considered properly furnished without a little library of books of reference, which shall contain at least one good cheap cyclopedia. The town library will now almost always furnish that, along with other good books of reference, among which we might mention, as admirably adapted to such purposes in all the departments on which it touches, Johnston's Chemistry of Common Life, which is much more than a dry treatise on Chemistry. In England this kind of teaching has been much more attended to than with us, and we could mention some excellent little English books, if they were not unfortunately so difficult to obtain. Such are Dr. Lankester's Lectures on Food and on the Uses of Animals, Archer's Popular Economic Botany with its colored plates, Sir Wm. Hooker's Popular Account of Kew Gardens; Simmond's Dictionary of Trade Products, and many others.

But now if we stopped here we should expect much adverse criticism. After all, it would be said, is it of so much importance that children should merely *see* things? Is there not sufficient satisfaction for curiosity of that sort outside the school-room. We do not doubt it; and if our aim were merely to bring the children to a sight of a great variety of objects, we should have to agree that it was hardly worth all the trouble. But we have a very different object in view; and in a future number we will try to describe the way, in which such a little museum should be used. [Ed.

A LESSON IN ENTOMOLOGY.

THE APPLE-TREE BORER.—The apple-tree borer is the larva or grub of rather a small beetle named *Saperda bivitatta*, or the two-striped *Saperda*, belonging to the family of *cerambycidae*, or long-horns, of the order *coleoptera*, or beetles. This beetle is about five-eighths of an inch long, and is of a straw brown color above,

with two longitudinal white stripes; the under parts are entirely of a creamy white color, and the legs and antennæ are of the same color, tinged with grayish. It comes out of the tree in which it has undergone its transformations, in the early part of June. During the day it remains concealed among the leaves of some tree, but when night comes on, it flies out to get its food and lay its eggs. These are placed on the bark of an apple-tree, near its roots. The grubs that are hatched from these eggs are composed of twelve segments or rings, and are at first very small, but rapidly increase in size. As soon as they are hatched, they cut with their jaws round holes through the bark, large enough to admit their bodies, into the solid wood. Then they bore upwards, and after a space of two or three years, they have proceeded about ten inches up through the wood, and have cut passages to the bark, a thin partition of which is all that is left between them and the open air. Here they change into the pupa or chrysalis state, and from that into perfect beetles which gnaw their way through the partition of bark, and so escape. The point where they lie concealed can often be distinguished by a small circular discoloration of the bark, and by carefully cutting it at this point, the beetle or the chrysalis can be obtained. They are rarely seen after they have escaped from the bark, as they fly only in the night; but they may sometimes be obtained by shaking a tree smartly, when they may be observed falling to the ground. Let our young readers try to procure some of them for the School Museum.

THE DOR-BUG.—Perhaps our young readers, in spading the ground, or turning over a heap of dry rubbish or old manure, may have come upon a number of large, fat, lazy, comfortable-looking white worms. It never probably occurred to them to connect these creatures with the stupid brown beetle who will insist upon flying in at the window of a summer night, and steering straight for the candle, and then bumping against their noses or putting his little claws into their hair? Yet the fat worm is the dor-bug that is to be, the May-beetle or cock-chaffer, as he is called in England. The fat grub is a mischievous fellow, devouring the roots

of grass, so that Dr. Harris * says the turf may sometimes be turned up like a carpet in consequence of the destruction of the roots. He is eaten greedily by the crows and the fowls. The beetle himself is no less mischievous, feeding as he does on the leaves of trees, and especially those of the cherry.

But here the blue jay comes in to help us. It was calculated by a careful observer that a family of five young blue jays, with their father and mother, consumed at the rate of twenty thousand such beetles in a single season, which is a pretty good allowance. The kind most common in Cambridge is the *Phyllophaga Georgicana*, i. e. the Georgian Leaf-eater; but a school-boy naturalist of our acquaintance, who, without allowing it to interfere with his school studies, has made for himself a very beautiful collection of the insects of the neighborhood, and knows their habits well, says that he has found three kinds in Cambridge, and moreover that they should not be called *Phyllophaga* or Leaf-eaters, as Dr. Harris calls them, but *Lachnosterna* or Hairy-chests, as Mr. Leconte calls them. We don't think it makes much difference, for we do not think that Entomology should be made to consist in giving long Greek names to short Yankee bugs, but in studying their wonderful structure and their curious and interesting habits. Our young friend has also shown us another in his collection, which he caught at Provincetown on Cape Cod, where it belongs, and which is distinguished by the possession of an unusually large and fierce-looking pair of whiskers — we beg the naturalist's pardon — we should have said *antennæ*. Why should Cape Cod beetles have large whiskers? Can the naturalists tell us whether it has anything to do with the sandy soil they live on?

Let our young readers next spring gather some of the chrysalids, which may be easily found, and watch their transformations. [Ed.]

* In his Treatise on Insects Injurious to Vegetation, a copy of which, along with a copy of the little tract on Insects Beneficial to Vegetation, published in one of the Mass. Agricultural Reports, ought to be in every School Library.

Editor's Department.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

We promised in noticing the first catalogue of this institution to give at some future time an account of its plan and purpose. The following is a brief sketch of its organization.

The Institute of Technology consists, at present, of two departments: a Society of Arts consisting of about three hundred members which holds meetings twice every month during the winter, and a Scientific School of which the present is the first annual catalogue. To these will eventually be added a Museum of Practical Science and Art. The government of the whole is vested in a President who is also President of the School, Prof. Wm. B. Rogers, well known as one of the most eminent of American men of Science; four Vice-Presidents, Hon. John Amory Lowell, Dr. Jacob Bigelow, Hon. Marshall P. Wilder and Dr. Morrill Wyman; a Secretary, Dr. Thomas H. Webb; a Treasurer, Charles H. Dalton, Esq., and various committees on which appear the well known names of John A. Andrew, George B. Emerson, Alexander H. Rice, J. Ingersoll Bowditch, Thomas Sherwin, John D. Philbrick, Fredk. W. Lincoln, Jr., and others. The Commonwealth which granted the land on which their building stands, is represented in the Government by the Governor, the Chief Justice, and the Secretary of the Board of Education.

The School of the Institute is designed, to use the language of the programme, "first, to provide a full course of scientific studies and practical exercises, for students seeking to qualify themselves for the professions of the Mechanical Engineer, Civil Engineer, Practical Chemist, Engineer of Mines, and Builder and Architect; and secondly, to furnish such a *general education* founded upon the Mathematical, Physical and Natural Sciences, English and other Modern Languages, and Mental and Political Science as shall form a fitting preparation for any of the departments of active life." The minimum age of admission is sixteen, and the regular course of study extends over four years, for the first two years of which the studies are the same for all, while during the last two each student is allowed to devote himself more particularly to the studies belonging to his profession without, however, neglecting those which form an essential part of the general training of every well-educated man.

It will thus be seen that we have here a college in which, for the training based chiefly on the classical languages of Greece and Rome of our older institutions, a training based chiefly on science, is substituted, and in which the philological element which must enter into every liberal education worthy of the name, is

represented by the modern instead of the ancient languages. It is not maintained by the friends and founders of the institution that this is an education which is to supersede all others. The value of classical study, in its proper place, is fully recognized by them; but as wider views of the problem are taken, it begins to be seen more and more clearly that there is no such thing as a universal education suited to all wants and all circumstances, but that there are many forms of higher education out of which each mind must choose that best adapted to its nature, and best suited to its wants. Moreover, in this country where the great practical demand is for trained men of science, capable of developing its vast resources and managing its enormous and growing material interests, it is seen to be no longer possible to base *all* the higher training of the community on the narrow foundation of dead languages, which was originally intended only for the clergy and a mere literary class.

It is with these views that the Institute of Technology was founded, to give a thorough training in preparation for the various scientific professions mentioned above, and also, and as a very essential part of its plan, to give a higher general education to young men intending to become merchants and men of business. It is not therefore exclusively a technical scientific school. It is not as are some of our scientific schools, divided into separate departments entirely distinct from each other. The training of all the students for the two first years is uniform, and embraces a general and thorough course of instruction in Mathematics (beginning with Quadratic Equations in Algebra, and with Trigonometry) in Physics, in Mechanical and Free-Hand Drawing, in Chemistry, in the English Language and Literature, and in Modern Languages; from the beginning of the third year the students devote more of their time to their special departments, but general studies will be to a greater or less extent continued.

The regular school opened the first year of its existence with *seventy-two* pupils. A third and distinct object of the institution is to provide courses of evening instruction for persons who are occupied during the day. Through the liberality of the Hon. John Amory Lowell, Trustee of the Lowell Fund, it has been enabled to offer this winter six gratuitous courses of this kind; one on Mathematics by Prof. Runkle, one on Descriptive Geometry by Prof. Watson, two on Chemistry by Professors Storer and Eliot, one on the French Language by Prof. B  cher, and one on the English Language and its Literature by Prof. Atkinson.

We commend, as in duty bound, this new and flourishing institution, which we trust is destined to a long career of usefulness, to the attention of our readers.

STUDY OF MODERN LANGUAGES AT HARVARD COLLEGE.

A recent report to the Board of Overseers of Harvard College, of the examining Committee in the department of Modern Languages, signed for the Committee by the Rev. Dr. J. F. Clarke, points out very emphatically the neglect the modern languages suffer, and the inferior place they hold in the College

curriculum, and proposes some remedies in addition to those already adopted during the past year. The committee show that while a minute knowledge of a very large amount of Greek and Latin, and a careful preparation in mathematics are required for admission to the College, a Student "is not required to be acquainted with any modern language, not even his own": that, after admission, while "for the *two* ancient languages, the university provides *six* instructors for the *four* modern languages, French, German, Spanish, and Italian, it provides *three*," and that these three are so ill paid, that "one of them M. Bócher, a most excellent instructor in French, has been compelled to resign, and another very valuable German teacher, Mr. Krauss, is scarcely retained:" that the study of modern languages has been systematically discouraged by a lower scale of rank in this department than in the others. The best recitation in French and German only gave a mark of six, while in Latin, Greek, and Mathematics, the highest mark was eight. Scholars therefore who studied for rank, and desired a part at Commencement, could not *afford* to take modern languages as an election.

The committee proceed to notice an improvement which has taken place in the arrangements during the present year, that whereas previously, Greek and Latin, required studies, occupied in the Freshman year ten hours of recitation per week, while modern languages were not studied, except voluntarily, in the higher classes, now two recitations per week in modern languages are required during the Freshman and Sophomore years. But they suggest further progress, and close their report with the following recommendations:

"When we consider the absolute need of a knowledge of French and German in almost every profession and pursuit to which our graduates are likely to devote themselves — that for the study of natural history, medicine, theology, engineering, botany, chemistry, astronomy, geology, mining, the fine arts, these studies are quite indispensable — we cannot but hope that the reform, now happily inaugurated, may be carried still further. We would venture, for example, to suggest:

1. That some knowledge of the French language be required for admission into the university, even though, in order to do this, the present demand, for example, of a knowledge of the Greek accents should be relinquished.

2. That *as much* time and study shall be given in the curriculum to the *four* modern languages, as is devoted to the *two* ancient languages.

3. That the *compensation* paid to the teachers of the modern language department be such as to secure and retain the services of accomplished and able men.

4. That equal rank be given to students for success in these studies, as in other departments, so that there shall be no discouragement on the part of the faculty to their choice as elective studies."

From the forthcoming Report of the Mass. Board of Education, we are permitted to make the following extracts:

THE DISTRICT SYSTEM. "In the fourth section of the thirty-ninth chapter

of the General Statutes, it is made the duty of every town divided into districts, to vote at the next annual town meeting, namely in 1866, upon the question of abolishing such districts. It is earnestly hoped that when this vote comes to be taken, it will result in the total abolition of this cumbrous and unwieldy district system, which has so long clogged the progress of educational improvement in the towns where it has been suffered to remain. Reason and fact alike condemn it as a fruitful source of inconveniences and evils. It perpetuates poor school-houses, inefficient teachers, and neighborhood feuds and jealousies. It prevents the equalization of school advantages, and stands in the way of a proper classification of pupils. As compared with the town system, it is at once expensive and inefficient. For these and other reasons, the highest authorities in educational economy agree in pronouncing an emphatic verdict against it. Horace Mann, at the close of his long term of service as Secretary, said of it: 'I consider the law of 1789, authorizing towns to divide themselves into districts, the most unfortunate law, on the subject of Common Schools, ever enacted in this State.' His successors have been no less decided in pronouncing it a deleterious element of the system. Dr. Sears, who devoted the greater part of an able report to the exposition of its evils, said: 'The division of a town into independent districts is a great sacrifice of economy, for which no equivalent is received.' Mr. Boutwell, with great earnestness, on all proper occasions, urged its discontinuance, and in his last report, he said: 'I trust that the day will again and speedily be seen when every town will, in its municipal capacity, manage its schools and equalize the expenses of education.' The present Secretary has demonstrated by the most convincing proof, the necessity of doing away with it. After years of experience and observation as pupil, teacher, a member of the school committee in city and country, and as Secretary of the Board, he says: 'I honestly and most firmly believe that the sub-division of the towns into numerous, and in the majority of cases, small districts, presents the most formidable obstacle to any considerable improvement in their schools.' Thus reason has arraigned it, fact has given evidence against it, argument has convicted it, experience has pronounced judgment upon it, and it only remains for the intelligent citizens, at the time appointed, by their votes, to put an end to its existence."

SALARIES OF TEACHERS. "One of the surest signs of the condition of education in any community is the estimation in which the profession of teaching is held. Where low views of education prevail, the teacher is valued at a low rate, and his services are poorly paid. On the other hand, where elevated and enlarged ideas of the nature and ends of wise education are entertained, the true dignity of the profession is appreciated, and the importance of securing to it the highest talent and accomplishments is practically acknowledged by providing the requisite means for the attainment of the end in view. Measured by this standard, our progress as a State, it must be confessed, has not been so satisfactory as could be desired. By a comparison of statistics it appears that in the course of twenty years the average wages of teachers, male and female, in this Commonwealth, have been advanced nominally

about fifty per cent. If, in the meantime, the average wealth of the State *per capita* had remained stationary, and if the wages of labor, in general, had not been raised, this increase might justly be regarded as a gratifying proof of progress. But the facts in the case will scarcely justify such a conclusion. Within the period named, such has been the increase in the valuation that the ratio of taxable property to population has been doubled, so that in reality the compensation of teachers has not kept pace with our growth in material wealth. That the wages of labor, of every other description, whether skilled or unskilled, professional or industrial, have risen more than fifty per cent, does not admit of question. The wages of male teachers average fifty-four dollars and seventy-seven cents per month. This rate does not exceed that paid to an ordinary journeyman mechanic. The six thousand two hundred and ninety-five female teachers receive an average of twenty-one dollars and eighty-two cents per month. It is more than probable that an equal number of females could be found in the State who are engaged in industrial occupations at a higher average rate of wages.

"These facts demand the serious consideration of the friends of popular education. Without good teaching, a school is but a name. But good teaching can be had only from men and women of high ability and ripe culture, and to suppose that such men and women can be attracted to the laborious profession of teaching without adequate compensation is a fatal delusion. Poor schools can be had cheap, but good schools will always be costly; and if the character of our Public Schools is to be elevated and improved, if they are to be kept up to the standard of excellence required by an advancing civilization, affording competent instruction to every child, it is absolutely essential that the compensation of teachers should be raised in proportion to the general increase of wealth in the community. Teachers will correspond in their character and qualifications to the demands of public sentiment as expressed in the rate of salaries paid. The demand creates the supply. If there is a real demand for gifted men and women, qualified by their intelligence and moral power to do the great work of education as patriotism and religion would wish it done, such men and women will not only be liberally paid, but they will receive other proofs of the consideration in which they are held, and thus they will be secured and retained in the profession. But while so many paths to wealth and promotion are open, while talent is invited through so many broad avenues to emolument and distinction, it is unreasonable, it is preposterous, to expect that superior persons—and only such can be good teachers—can, in sufficient numbers for the wants of the present time, be won to the arduous and responsible office of teaching without stronger inducements than have yet been offered. As to the pecuniary ability of the Commonwealth to pay the teachers of her children, it is sufficient to state that at present only about one mill and a half on a dollar of valuation is appropriated to this object, and in the most wealthy cities the ratio even falls below this small fraction."

OBITUARY.

Died in Rockville, December 23d, Miss Betsey L. Adams, aged 46 years. We feel that something more than a mere passing notice is due to the memory of one so justly esteemed as a faithful, efficient teacher; one who has labored so successfully to promote the cause of education, and whose sudden death will long be deeply mourned by a large circle of pupils who have been favored with her instructions for many successive years.

For nearly thirty years the deceased was engaged in what she always esteemed the delightful employment of teaching, during most of the time in the town of Medway, where she resided for many years previous to her death; and seldom do we see one in whom *so many*, if not *all* the requisite qualifications of a good teacher were so happily blended. Possessing a mind of a high order, strong, active, well balanced; endowed with talents of no ordinary character, having uncommon energy and perseverance; blessed with a cheerful, happy disposition, kind and gentle, yet firm and decided, together with a rare tact for imparting instruction, she readily won the love and esteem, while she secured the respect and obedience of her pupils.

But the true secret of her long continued success, was her *ardent love* of the employment, a love which increased instead of diminishing. She remarked to a friend only a few weeks previous to her death, that the longer she taught, the better she loved to teach. With her, teaching was not a task, or a mere mechanical routine of daily duties; she *loved* the work, and devoted herself and all her energies to it; indeed, her whole end and aim seemed to be to benefit her pupils, and train them up for lives of usefulness here, and fit them for happiness hereafter.

It was her custom in the course of her reading, and from various other sources, to treasure up items of historical or scientific knowledge, and each day communicate one or more facts to her pupils, and in this way, she imparted much valuable information which they would not otherwise have acquired.

No exertions were too great, no sacrifice too much for her to make. It was enough for her to know that her pupils were made wiser and better and happier, at whatever cost of toil or sacrifice to herself. But while she was so anxious to promote the intellectual improvement of her pupils, she did not forget their moral and religious culture. A devoted, consistent Christian herself, she endeavored both by example and precept, to exemplify the religion of Jesus, and we doubt not that, through her instrumentality, many of her pupils have been led to seek that good part which can never be taken away.

"She rests from her labors, and her works do follow her." Her earthly mission is ended, her work done, and well done, and she has gone to her reward.
[Communicated.]

INTELLIGENCE.

We are pained to have to record the death, by drowning, on Christmas, at Edisto Island, S. C., of three teachers employed under the auspices of the Freedmen's Association:— Miss Ellen S. Kempton, formerly a teacher in the Cedar St. Primary School, in New Bedford: Miss Stanton, of Lowell, and Mr. James P. Blake, of New Haven.

Mr. John P. Averill, for many years the efficient and successful master of the Chapman School, at East Boston, has resigned his situation, preparatory to removing to Madison Co., Mississippi, where he has purchased a plantation, and will go into the business of raising cotton stock, etc.

A correspondent sends us an account, which we have not room to print, of the very popular and successful efforts of Prof. Mark Bailey, of Yale College, to promote an interest in the great cities of the West, in the study of Elocution and the neglected art of Reading. We rejoice to see judicious efforts made in this direction.

Miss Maria Baldwin, a graduate of Baldwin University, at Berea, O., has been filling, during the past year, the chair of Professor of the Greek and Latin languages, in the Baker University, Kansas.

Our excellent Normal Schools have all held their semi-annual examinations and exhibitions during the past month, and we regret that want of space prevents us from copying a portion of the interesting reports of the exercises. At the Salem School, now in charge of Mr. D. B. Hagar, fourteen young ladies graduated in the regular and two in the advanced class. At the Framingham School, which, during the absence of Mr. Bigelow in Europe, has been wholly in charge of the lady assistants, twenty-six young ladies graduated, and at Bridgewater, twelve ladies, and two gentlemen. The exercises at Westfield take place after we go to press.

The Board of Education of the city of St. Louis has been empowered by the Legislature of Missouri to lay a tax not exceeding *one-half of one per cent*, for school purposes, on all the taxable property of the city, the Board to determine said rate each year. This liberal provision speaks well for the progressive spirit of the great West. One-half of one per cent on the taxable property of Boston would amount to a million and a half of dollars.

The January number of the *Illinois Teacher* contains a long and interesting report of the meeting of the State Teachers' Association, held at Joliet, Dec. 26. From the address of the President, Mr. S. M. Etter, we extract the following passage illustrative of the rapid advance our Western States are making in educational matters.

"The question may very properly here be asked, What has been done? In answer I would say,— A school-law has been enacted almost unparalleled in the liberality of its provisions, and a large majority of the people of the State are in

favor of every provision of the law, and will sustain it. Provision is made for the education of teachers in the State Normal School, which, for liberal support and efficient management, has no superior: its influence is already felt throughout the State. The office of State Superintendent of Public Instruction has been created, and the people have placed in that office one of our own number, of whom it can safely be said that no State can boast of a better, a wiser or a more efficient officer. Free Schools have been established throughout the State, which, to-day, are the pride of every good citizen. A few years ago there were but few schools, and those wholly unclassified. The progress that has been made during the last fifteen years, and especially during the last ten, in labors tending to improve the character and usefulness of the schools and teachers of the State, is truly a proper theme for congratulation here to-day."

We are glad also to see the following opinion expressed: "That all grades of schools may be even moderately successful, *good libraries* are indispensable both for the teachers and pupils."

We find the following account of the recent meeting of State School Superintendents at Washington in the correspondence of the Boston Advertiser:

"The convention of State School Superintendents has closed its session, and adjourned to meet at Indianapolis on the thirteenth of next August. The session here was a success beyond all expectation, and there is full warrant for saying that this success was largely due to the energy and earnestness of Superintendent Northrup of Massachusetts. The primary object of the convention was to give an incentive to the educational cause of the South, and the sense of the delegates found expression in a resolution declaring that the establishment of systems of common schools in the Southern States will do much to harmonize their relation with the other States of the Union, and that there is no other plan by which they can more readily and certainly secure the development of their great material resources. Another resolution expressed sympathy with the people of the South in their efforts to secure a system of public education, and still another suggested to General Howard the propriety of establishing training schools for colored teachers, who should ultimately be sent South to teach their own people.

Throughout the session there was frequent and complimentary reference to the school system of Massachusetts. Messrs. White of Ohio, Coburn of Pennsylvania, and Adams of Vermont, were appointed a committee to urge upon Congress the establishment of an educational bureau, and Mr. Northrup was chosen permanent president of the association."

The memorial of the Convention was presented to the House on the 14th, by Representative Garfield, together with the draft of a bill creating a Bureau of Education in the Department of the Interior. "For the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and diffusing among the people such information respecting the instruction, organization and management of schools and the school system, the Bureau is to be under the charge of a Commissioner to be

appointed by the President, with the advice and consent of the Senate, who shall present an annual report to the Secretary of the Interior, embodying recommendations and the result of his investigations." If the functions of the Commissioner are thus limited to the collection and dissemination of information, we do not doubt the Bureau may become the means of accomplishing a great deal of good.

The papers were referred to a select committee of seven.

The following are some of the salaries which will be paid to teachers the coming year in some of the cities adjoining Boston :

In Charlestown: Principal of the High School, \$2200; sub-master, \$1600; first assistant, \$750; second, \$575; third, \$450; fourth, \$450; principal of grammar schools, \$1800; sub-master of Winthrop School, \$1400; of the Prescott, \$1000; sub-masters of Warren, \$600; head assistants of grammar, \$550; assistant teachers, \$450; teachers of intermediate schools, \$500; teachers of primary, \$450; teacher of music, including rent of pianos, \$1300. In Roxbury: Principal of the High School, \$3000 per annum; principals of the Washington, Dearborn, and Comins Schools, \$2000; principal of the Dudley School, \$1000; first assistant of High School, \$1000; second assistant of High School, \$700; teacher ex-seniors, \$600; first and second assistants in grammar schools, each \$550; all others, do., \$450 first year, \$500 afterwards; teachers in primary schools, \$400 for first year, \$425 for second, and \$450 for third year. In Chelsea: Mr. Pitman, High School teacher, \$2300 per annum; assistants, \$700 each; Mr. Payson, grammar school, \$1800; teacher of girl's grammar school, \$1200; and all other teachers, 25 per cent. increase.

We are requested to publish the following

NOTICE. The meeting of the NATIONAL TEACHERS' ASSOCIATION will be held at Indianapolis, in the State of Indiana, commencing on the 15th of August.

Full programmes will be published in due time.

All Educational Journals are requested to copy this notice.

J. P. WICKERSHAM,

President.

BOOK NOTICES.

THE PRACTICAL ENTOMOLOGIST: a Monthly Bulletin published by the Entomological Society of Philadelphia, for gratuitous distribution among Farmers and Agriculturists, Vol. 3, Nos. 1 to 4. Are our readers aware that by merely sending twelve cents to cover postage, they can receive this excellent little Bulletin, containing in each No. an amount of practical information on the subject of insects injurious or beneficial to vegetation that would be well worth to many persons a handsome subscription; and especially to teachers, if what they read in it would induce them to study this exceedingly interesting branch of natural history, and teach their pupils to become practical observers. Here they will learn of the new potato-bug, which is travelling slowly but surely at the rate of

fifty miles per annum, eastward from the Rocky Mountains, and will presently be desolating our potato fields, as it has already done those of Iowa; of the way in which the farmers were taught by a certain entomologist to burn the straw in their fields in order to get rid of the joint-worm, and thereby destroyed, not their enemy, but a little insect who preyed upon him, and was their greatest friend; about the various silk-producing insects of *this* country; about the little creatures,—not taking up much room in the world, for they are only four one-hundredths of an inch in length,—who busy themselves in ridding us of canker-worms; of the different kinds of borers, and their habits; in short, they will have one of the best arguments we have seen this many a day to prove the utility and the necessity of the study of natural history in schools, and one of the best helps to the teacher. Let teachers send their twelve cents to E. T. Cresson, 518 South 13th Street, Philadelphia, and better still, if they can afford it, one dollar, which will make them Contributing Members to this very useful society.

North and South America: a Discourse delivered before the Rhode Island Historical Society, December 27, 1865, by His Excellency Domingo Faustino Sarmiento, Argentine Minister to the United States. Providence: Knowles, Anthony & Co.

We wish we had room to quote from the discourse of this excellent and enlightened man, who has done so much for education in his own country. His remarks on the growing importance of the Spanish language we commend to all teachers. "The Castilian language," he says, "lies before the North American people like a conducting wire, and should be the language taught in the schools where any other language is taught besides English. Your teachers will then open colleges in twenty South American States, in two hundred capitals of provinces, in a thousand towns and villages, and with advantage to themselves, will prepare the ground for the plough, the sowing and reaping machines, and the 6,600 patents of inventions granted by your patent office this year, which are not now used among us because the understanding of the people is not prepared to appreciate them. This is the only conquest really worthy of a free people; this is the 'Monroe Doctrine' in practice."

A Third Reader, or a Grade between the Second and Third Readers of the School and Family Series, by Marcius Willson. New York: Harper & Bros. 12mo, pp. 216.

We have always thought that Mr. Willson's series of readers was compiled on a truer principle—that of conveying interesting and valuable *information*, as well as of furnishing specimens of fine writing—than any other set of Readers published in this country. We have never used them sufficiently to enable us to criticise them in detail; but we remember well that when they stood on our school-room book-shelves side by side with many others, they were taken down and thumbed incessantly by the boys, while their brethren were left untouched. The present volume is prepared upon the same plan, and contains some lessons on insects illustrated by very nice wood-cuts. We should think it interesting to, and within the comprehension of children, and therefore good of its kind.

CANARY BIRDS: A Manual of Useful and Practical Information for Bird Keepers. New York: Wm. Wood & Co. 1866. Small 12mo, pp. 110.

This dainty little book, with its neat yellow covers, seems an attempt to imitate in outward appearance, as far as book can, the pretty pets to which it is devoted. Here will be found all needed information respecting Kinds, Breeding, Food, Teaching Young Birds to Sing, Aviaries, and Cages, &c. We cannot speak of its quality from knowledge. The last member of our household to whom it would apply fell a prey, if we remember rightly, to a monster of the feline race, similar to the one who has lately had her photograph taken, smiling blandly, and licking her wide chops, with this inscription: "*I've ate the Canary.*"

The Lectures delivered before the American Institute of Instruction at New Haven, Conn., August, 1865, including the Journal of Proceedings and a List of the Officers. Published under the direction of the Board of Censors. Boston: Committee of Publication. 1866. 12mo. pp. 266. \$1.

This is the *thirty-sixth* volume of the whole, and the *twenty-sixth* of the 12mo series. We are fortunate enough to possess them all, save one, the volume for '33; and we think it cannot be denied that the series, taken together, contains as much of valuable thought on the subject of Education, and presents it in a greater variety of aspects, and in the light of a greater variety of minds, than almost any similar series of volumes that could be named; indeed, out of Germany, we doubt if any series so extensive can be found.

A careful report of the proceedings of the meeting occupies 112 closely printed pages of this volume, and embraces addresses on various subjects, from Dr. Taylor of Andover, Prof. Thacher of Yale College, Hon. Joseph White, Bishop Smith, President Haven of Michigan, Hon. D. F. Sarmiento, Minister of the Argentine Republic, Gov. Andrew, and many others. Then follow four lectures, the first on the Teaching of Moral and Political Duties in the Public Schools, by President Woolsey of Yale College; the second on the Indirect Benefits of School Education, by President Haven of the University of Michigan; the third on Civil Polity as a Branch of School Education, by Ex-Governor Washburn of Massachusetts; and the fourth on Dynamic and Mechanic Teaching, by the Editor of this journal. Leaving out of account the last few pages, we think every teacher will get a good dollar's worth in the remainder of the volume. It can be obtained at the office of the *Teacher*, or by addressing W. E. Sheldon, Chairman of the Committee of Publication.

First Annual Report of the Baltimore Association for the Moral and Educational Improvement of the Colored People, November, 1865.

Who will despair of the country, when he sees such efforts to raise again to manhood, the long down-trodden colored race? It is with sadness that we miss one name that would surely have been in this list of officers, had not he who bore it given up his life for his country, as truly as ever did soldier on the battle-field; a name well known to Massachusetts teachers, the name of SEBASTIAN F. STREETER.

Annual Report of the Board of St. Louis Public Schools, for the year ending August 1, 1865.

Now that the incubus of slavery is removed, St. Louis is starting forward on the race of educational improvement with wonderful rapidity. In another part of our number, it will be seen that she has laid a tax on her citizens for educational purposes, far greater than Boston, with all her noble doings, ever dreamed of. She has also the first, and only Normal School, whose principal is a woman, Miss Anna C. Brackett, of (we are proud to say), Massachusetts. We notice also, on the Board of Trustees of the "Public School Library," besides the well known name of Rev. Dr. Eliot, the names of three ladies.

Report of the School Committee of the city of Springfield. We should think from this report, that Springfield was a pre-eminently progressive city, as far as relates to Education. The Committee report that in no year have the expenditures for education been so large. The salaries of teachers have all been raised; a Superintendent of Schools appointed; two large school-houses have been built, and the occasion has been taken to re-organize and grade the schools. "All the children belonging to the grades between the primary and the High School, are to be gathered into the school-houses of their respective sections, and there combined into one school, and under one head or Principal, whose controlling and regulating power will pervade the whole school, and all its departments subject only to the supervisory authority of the Committee, and the General Superintendent of Schools." We are indebted to the Superintendent, Mr. E. A. Hubbard, whose careful report occupies a portion of the pamphlet, for our copy.

A Discourse delivered in the Howard Presbyterian Church, San Francisco, Thanksgiving Day, December 7, 1865, by Henry Martyn Scudder, D. D., Pastor. Published by Request. San Francisco: Towne & Bacon, 1865.

This elegantly printed pamphlet shows that California printers do not mean to be a whit behind the foremost brethren of their craft on this side of the continent. The discourse is a sound and patriotic one.

SOCIAL LIFE OF THE CHINESE: With some account of their religious, governmental, educational, and business customs and opinions. With special but not exclusive reference to Fuhchau. By Rev. Justus Doolittle, fourteen years member of the Fuhchau Mission of the American Board. With over one hundred and fifty illustrations. 2 vols. 12mo. New York: Harper & Brothers. 1865.

To learn Geography is not to commit to memory long lists of unpronounceable names, or tables of lengths of rivers and heights of mountains, but by the reading of such books as this, to learn really to know the character and manners of foreign nations, and the nature of the country they inhabit. What real knowledge of China does a child get from the meagre lesson of its text-book? In most cases none whatever; for it makes no impression on his mind. But let this book, with its hundred and fifty capital wood-cuts and its minute account of the strange manners of a strange people, be in the school library, and we will venture to say that there will be few boys or girls in that school so incurious as to leave it without a very tolerable notion as to what manner of people the Chinese are.

And we might extend our remarks to that long series of admirably illustrated books of travel which form such a special feature in the catalogue of the Messrs. Harper. We hope the time will come when a little library will be considered an indispensable part of the furniture of every school-room. A great deal of time is wasted in all schools in listless idleness, and thus children learn bad habits of mind which perhaps they never overcome. Let them read good books, and let it be a part of every teacher's duty to teach young people *how* to read for their own amusement and instruction.

In these volumes we have the Chinese exhibited both with pen and pencil in all the relations of life. We can see their weddings and their funerals, their trade and their worship, and the hideous punishments of their criminals, their amusements and their meals, and what will particularly interest teachers, we have two or three chapters devoted to their education.

The books are very handsome, and we owe them, among many other favors, to our friends A. Williams & Co.

THE RIGHT WAY. Boston. We presume it is no secret that Professor Alpheus Crosby, so well known to all teachers in the State, is the editor of this little weekly, devoted to the cause of the Freedmen, and the establishment of Liberty and Equal Rights for all men in the nation. Through the princely liberality of Major George L. Stearns, *sixty thousand* copies of it are distributed gratuitously every week. We commend it to the attention of our readers.

The Student and Schoolmate. Vol. XVII., Nos. 1 and 2. Joseph H. Allen, 119 Washington St., Boston.

We did better than read this pretty magazine ourselves. We submitted it to a committee of youngsters who are in the habit of reading several other periodicals of the same kind, and they unanimously pronounced it "the best of the lot,"—"prime,"—an emphatic endorsement which is far more valuable than our own. We will only add that it is printed with great neatness, contains uncommonly nice and artistic wood-cuts, and is edited by "Oliver Optic," a name known to all boys. We recommend it to all our readers in want of a juvenile periodical.

Mothers and Daughters, by Mrs. Gaskell. Harper & Brothers.

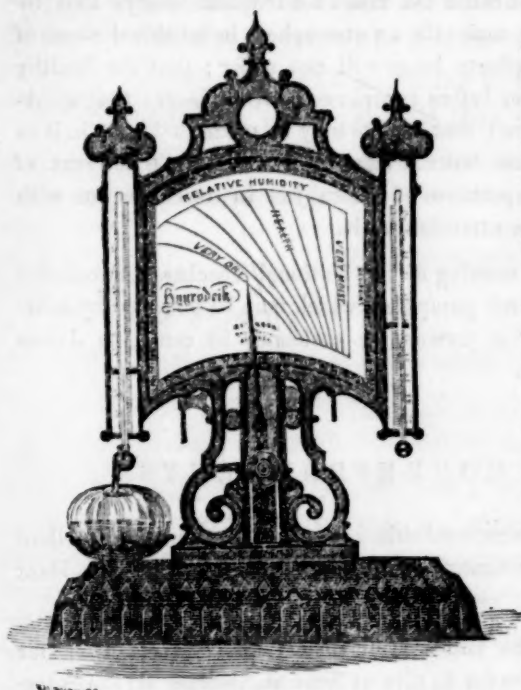
This is the most charming novel of the season. Alas, that it should be the last work of its admirable author, and that the pen should drop from her hand even before its completion! Happily we get far enough to know how it will all end. Roger will come home from Africa, and Molly will be happy, and all will be right. There is instruction as well as the most delightful entertainment in reading such nice delineation of character as this novel contains; and if the tone of all novels were as healthful and the purposes as pure, we should hear little against novel-reading. We recommend all our readers who can buy, borrow, or hire the book, to read it.

Guy Deverel, by J. S. Le Fanu. Harpers' Library of Select Novels. A poor performance.

Half-a-Million of Money, by Amelia B. Edwards. Another of the same series containing a pretty portrait of the fair authoress.

S. R. Urbino's Catalogue of Standard Educational Works for the Study of Foreign Languages. We call the attention of all our readers engaged in the study or the teaching of French, German, or Italian, to the list of Mr. Urbino to be found among our advertisements. Times are greatly changed since we began the study of French, out of little shabby copies of Molière, Racine, and Boileau. Here, for a very trifling sum, may be obtained the works of *modern* authors, and probably the best possible way of attaining a knowledge of the French of to-day is to read such a series of modern French plays as those edited with notes by Prof. Bôcher. There is also the added recommendation to students residing near enough to the city to take advantage of the admirable French company of comedians who now visit Boston every winter, that many of the plays are acted by them. There is no such acting on our stage, and we have found by personal experience that to attend their charming performances is an excellent way of learning to understand spoken French without going to Paris.

Mr. Urbino's list of German works is equally cheap and good, and he has lately published a little volume of English Dictation Exercises by Miss Sewell, which a judicious teacher can make very good use of in teaching spelling.



The use of Edson's Hygrodeik, an instrument for showing by means of a Dial the state of the air we breathe; for dwellings, schools, hospitals, churches, halls, conservatories, mills, &c. William Edson, No. 10 Studio Building, Boston.

We believe that one-half the community are making living mummies of themselves and ruining their health by living, not so much in too warm, as in too *dry* an atmosphere; in one from which almost all the natural moisture has been abstracted. We have accordingly taken pains to borrow the wood-cut of the elegant little instrument of Mr. Edson, and desire to draw the attention of our readers to its very great usefulness.

Like older instruments of the same sort, it consists of a dry and a wet-bulb thermometer; but its peculiar feature, and that which makes it available for popular use, is the ingenious mechanical arrangement by which a dial and

index are made to take the place of a book of tables ; so that, by an adjustment which any one can learn to make, the relative humidity of the atmosphere of any apartment, and the question whether it is at a healthy point can be determined by mere inspection.

Omitting other uses to which the instrument may be put, we wish to dwell upon this dryness, as the real cause of much sickness and ill health in the community. Many persons wonder why in hot furnace-heated houses they still feel cold and uncomfortable. It is not for want of heat, but for want of *moisture* in the air they are breathing. "The very important fact," says Mr. Edson, "that air at a low temperature can contain but a small amount of moisture in comparison with that which it should contain if raised to a high temperature, is usually entirely overlooked," — and though feeble attempts are usually made to supply the missing moisture, it is very rarely that anything like the proper supply is furnished. If that duty is not properly performed we have here for our mantel-pieces a little instrument which warns us of the deficiency ; and it is a highly important fact that we can live comfortably in a much lower temperature, if only sufficient moisture be present.

Mr. Edson's little instrument costs from \$15 to \$25. We wish it could be introduced into all our school-rooms. We would have called it a "Moisture Indicator," instead of turning that into an awkward Greek word, but we believe that its inventor does not claim too much for it when he says that by following its indications we can maintain an atmosphere in inhabited rooms of such a nature that the most delicate lungs will not suffer ; that the healthy will feel a degree of comfort never before experienced within doors ; that speaking or singing becomes a pleasure ; that plants may be made to bloom in it as well as in a conservatory ; and last, but not least in these times, 20 per cent. of fuel may be saved. The great importance of the subject in its connection with health is the reason why we draw attention to it.

The proceedings of the recent meeting of the National Teachers' Association have been published in a handsome pamphlet, which may be obtained by members on application, and by other persons by enclosing 50 cents, to James Cruikshank, Esq., Albany, N. Y.

NOTICES TO CORRESPONDENTS.

We have postponed valuable communications, in order to print the excellent practical article on teaching grammar. Will the author send us (Resident Editor) her name ?

The report of the meeting at the Educational Rooms was received after our No. was made up. We shall endeavor to give at least an abstract of the interesting discussion in our next issue.